

REMARKS

Claims 12-14 and 16 are pending in the application.

In the specification, the paragraph containing cross-references to priority applications has been amended to give the status (*i.e.* issued or abandoned) of the priority applications.

1. 35 U.S.C. §112, first and second paragraph Rejections

The Examiner rejected claims 12-13 and 16 under 35 U.S.C. §112, first and second paragraphs. Applicants have amended claims 13 and 16 as follows and canceled claim 12. Claims 13 and 16 have been amended to no longer depend from canceled claim 12. Deletion of claim 12 also removes the "at least about 80% identity" language; therefore, the currently pending claims relate to SEQ ID NO: 7 and SEQ ID NO: 4 comprising at least one of the following amino acid substitutions D168→T, S170→Q and L175→F. In light of the amended claims, Applicants respectfully request that the 35 U.S.C. §112, first and second paragraph rejections be withdrawn.

2. 35 U.S.C. §102(a) Rejection

The Examiner rejected claim 12 under 35 U.S.C. §102(a) as allegedly being anticipated by two Chadwick *et al.* references (Genomics 50:357-67, June 1998, and Mammalian Genome 9:162-4, Feb. 1998). Cancellation of claim 12 removes the Chadwick *et al.* references; therefore, Applicants respectfully request that the 35 U.S.C. §102(a) rejection be withdrawn.

3. 35 U.S.C. §103(a) Rejection

The Examiner rejected claim 16 under 35 U.S.C. §103(a) as allegedly being anticipated by either of the two Chadwick *et al.* references each in view of Harlow *et al.* or Gennaro *et al.* Applicants respectively disagree. The Examiner alleges that the cited references render the instant invention obvious by the disclosure of a CD39L4 polypeptide in the Chadwick *et al.* Genomics reference or a mouse NTPase polypeptide in the Chadwick *et al.* Mammalian Genome reference. However the polypeptide of SEQ ID NO: 4 comprising at least one of the amino acid substitutions of D168→T, S170→Q and L175→F is patentably distinct from either the CD39L4 sequence or the mouse NTPase sequence as they do not share 100% identity. Therefore, neither

PATENT
Docket No.: 28110/35761A

of the Chadwick *et al.* references anticipates the polypeptides of the present invention and reference should be eliminated thereby mooted the rejection under 35 U.S.C. §103(a). In light of the aforementioned remarks, Applicants respectfully request that the 35 U.S.C. §103(a) rejection be withdrawn.

CONCLUSION

On the basis of the foregoing amendments and remarks, Applicants respectfully submit that the pending claims are in condition for allowance, and a Notice of Allowance is respectfully requested as soon as possible. If there are any questions regarding these amendments and remarks, or if further discussion would expedite allowance of the claims, the Examiner is encouraged to contact the undersigned at the telephone number provided below.

Respectfully submitted,

Date: April 29, 2004

By: Renée S. Polizotto
Renée S. Polizotto, Ph.D.
Agent for Applicants
Registration No.: 53,474
Customer No.: 34285
NUVELO, INC.
675 Almanor Avenue
Sunnyvale, CA 94085
Tel. (408) 215-4522
Fax (408) 524-8145